

Inf 13/12/23
DE 13/12/28
A.C.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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Work Order ID 109916

December-05-13 2:35:52 PM

109916

Page 2

Item ID: 646.3310

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: LH Half

Start Date: 12/05/13

Start Qty: 20.00

20

Cust Item ID:

Required Date: 12/19/13

Req'd Qty: 20.00

20

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC8- Inspect parts - second check	0.00							
130									
QC	Memo	0.00							
Quality Control									
131		0.00							
131									
HandFinish	Memo	0.00							
Hand Finishing	CLEAN AND REMOVE ALL PART MARKING								
140	Outsource process-Anodize per QSI017 4.1.10.1	0.00							
140									
Outsource4	Memo	0.00							
Outsource process - Anodize	Issue P/O to ATG : <u>82580</u>								
	1- Black Anodize as per Dwg 646.3300								
	2- PRIME AS PER DWG, SEE NOTE #2								
	Certification of Comformity is required								

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Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

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FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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Work Order ID 109916

December-05-13 2:35:52 PM

109916

Page 3

Item ID: 646.3310

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: LH Half

Start Date: 12/05/13

Start Qty: 20.00

20

Cust Item ID:

Required Date: 12/19/13

Req'd Qty: 20.00

20

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Receive & Inspect for Damage & Mat'l Certs	0.00							
150									
Packaging	Memo	0.00							
Packaging									
155	QC5- Inspect part completeness to step on W/O	0.00							
155									
QC	Memo	0.00							
Quality Control									
180	Identify as per dwg & Stock Location: <i>composite</i>	0.00							
180									
Packaging	Memo	0.00							
Packaging	***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV***								

12/13/13 *(2)*

12 *12/14/14.02.07*

12 *12/14/14.02.07*

DQA: _____ Date: _____



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Work Order update only ☐

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Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>			

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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Work Order ID 109916

109916

Page 4

December-05-13 2:35:52 PM

Item ID: 646.3310

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: LH Half

Start Date: 12/05/13 Start Qty: 20.00

20

Cust Item ID:

Required Date: 12/19/13 Req'd Qty: 20.00

20

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.00							
Quality Control									

14-02-7

14-02-07

DQA: _____ Date: _____



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Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other _____ _____ _____ _____
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Picklist Print

Page 1

December-05-13 2:35:55 PM

Work Order ID: 109916

109916

Parent Item: 646.3310

646 3310

Parent Item Name: LH Half

Start Date: 12/05/13

Required Date: 12/19/13

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP REV:A NEW ISSUE 12/11/17 JFS VERIFY BY: JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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M7075T6B7.000X2.000

Purchased

No

f

19.2822

24

M7075T6B7 000X2 000

7075-T6 BAR 7.000" X 2.000" (order in billets)

Location

Loc Qty

Loc Code

MAT001

19.2822

124030

2.445

M126143

3.2752

M127420

13.562

13.562

sub 13/12/23

Cut Blank at 13.375" /GRAIN ALONG 13.375

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Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

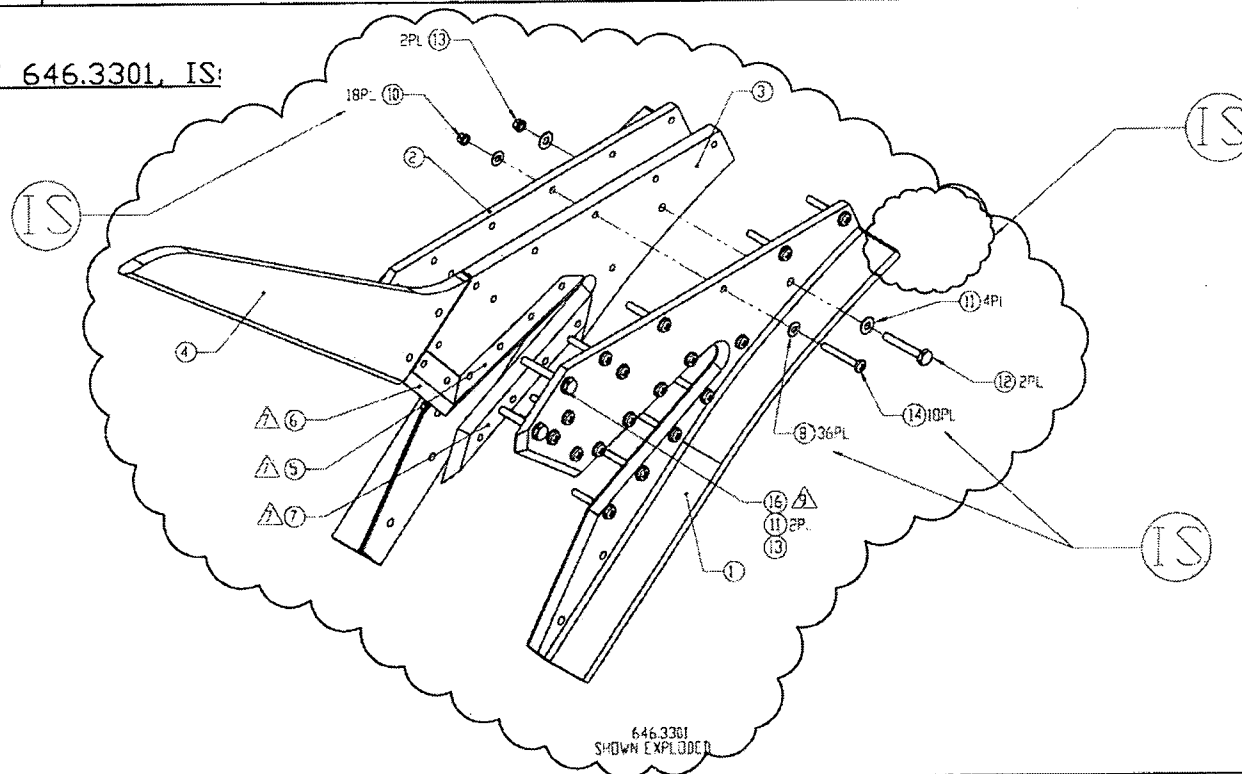
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Equip/Tooling									
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Material									
Operator									
Offset/Setup									
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Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICL NO. 02196		SHEET 1 OF 2	
	DWG NO. 646.3300	REV: N/C	PREPARED BY S. HUFF	DATE: 01/05/09
	EFFECT ON DWG <input type="checkbox"/> INC. <input checked="" type="checkbox"/> UNINC.			
DWG TITLE: UPPER CUTTER ASSY				
APPROVED BY: ENGR <i>[Signature]</i>	MFG <i>[Signature]</i>	QC <i>[Signature]</i>	EFF: NEXT ORDER	
TRANSACTION CODES (TC) A-ADD C-CREATE R-REVISE D-DELETE	REASON: REMOVED RIVETS IN FAVOR OF ADDITIONAL SCREWS			

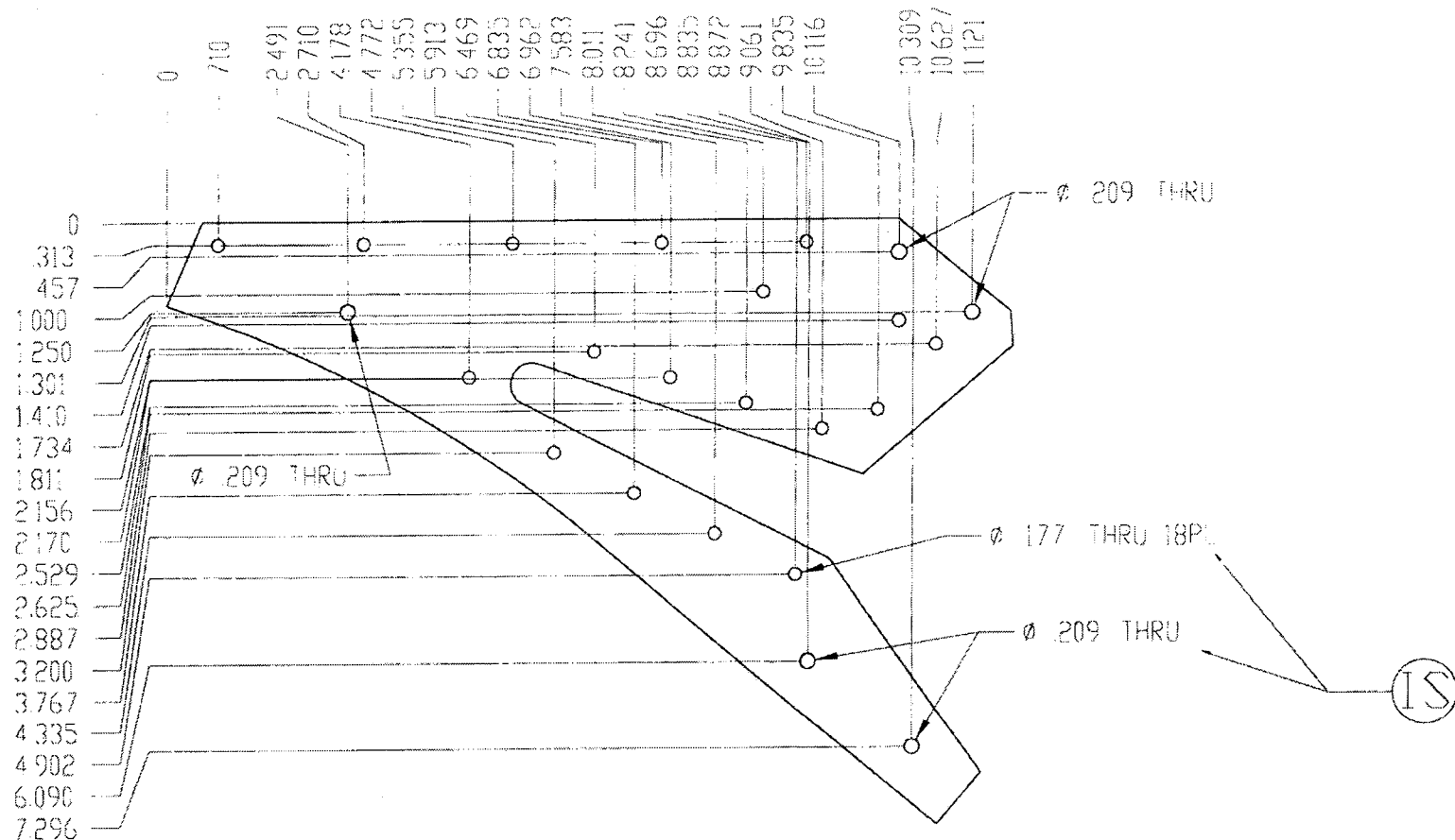
SHEET 1, VIEW 646.3301, IS:




109916 MLC
13-12-05

14	R	601.2765	18	SCREW	MS27039-0819
10	R	601.1541	18	LOCKNUT	MS21042L08
9	D	601.2766	3	RIVET	MS20470AD5-18
8	R	601.2764	36	WASHER	NAS1149FN832P
			.3301		
F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION
DOCUMENTS EFFECTED:				<input type="checkbox"/> MDL <input checked="" type="checkbox"/> INSTALL INSTRUC <input checked="" type="checkbox"/> ICA <input type="checkbox"/> FMS <input checked="" type="checkbox"/> BOM	CHANGE CATEGORY <input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR
				DER REVIEW REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	

SHEET 3, SECTION VIEW A-A, IS:



SECTION A-A 

F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION

RECEIVED					
KEY	(DESCRIPTION)	DATE	APPROVED		



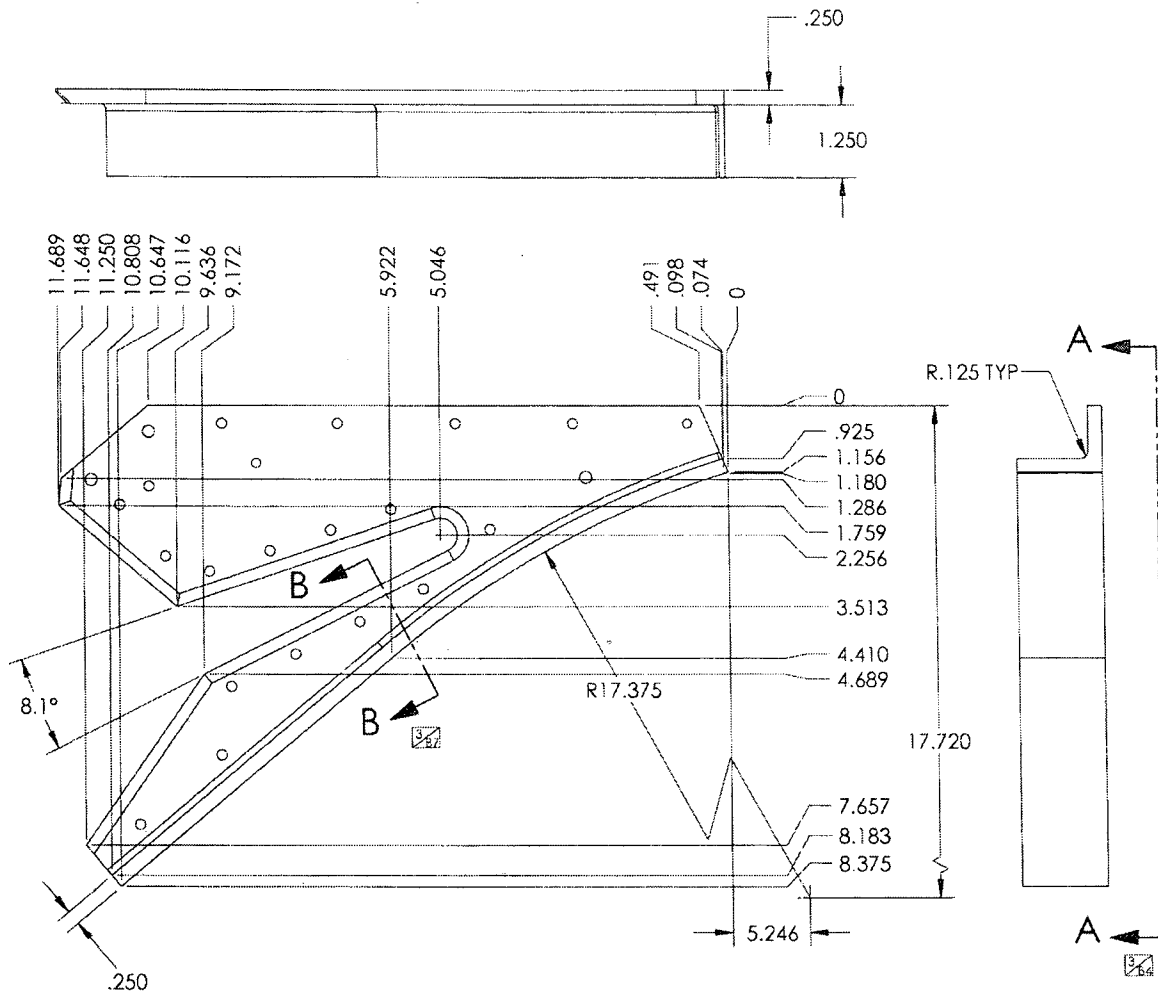
9 INSTALL FASTENER FINGER-TIGHT

	1	16	601.2534	BOLT		402.16A	
A/R	15	15	601.2045	RIV. LOCITE 598			
15	14	601.2765	SCREW		MS25249-08-14		
3	13	601.1624	LOCKNUT		AL2104-2.3		
2	12	601.2763	BOLT		8179-12A		
6	11	601.1607	WASHER		16-31-1449G325P		
15	10	601.1541	LOCKNUT		AL2104-2.05		
3	9	601.2766	RIVET		MS25249-08-16		
30	8	501.2764	WASHER		NA521429-04-22P		
1	7	646.331.6	BLADE		△		△
1	6	646.331.5	BLADE		△		△
1	5	646.331.4	BLADE		△		△
1	4	646.331.3	UPPER GUIDE		△		△
1	3	646.331.2	CENTER PLATE		△		△
1	2	646.331.1	RH HALF		△		△
1	1	646.331.0	LH HALF		△		△
			UPPER CUTTER ASSY				
NO.	END #	PART #	DESCRIPTION		MATL		SPEC

SIZE B	CAGE CODE 07M26	QWKS TIO A	646.3300	REV. N/C
-----------	--------------------	---------------	----------	-------------

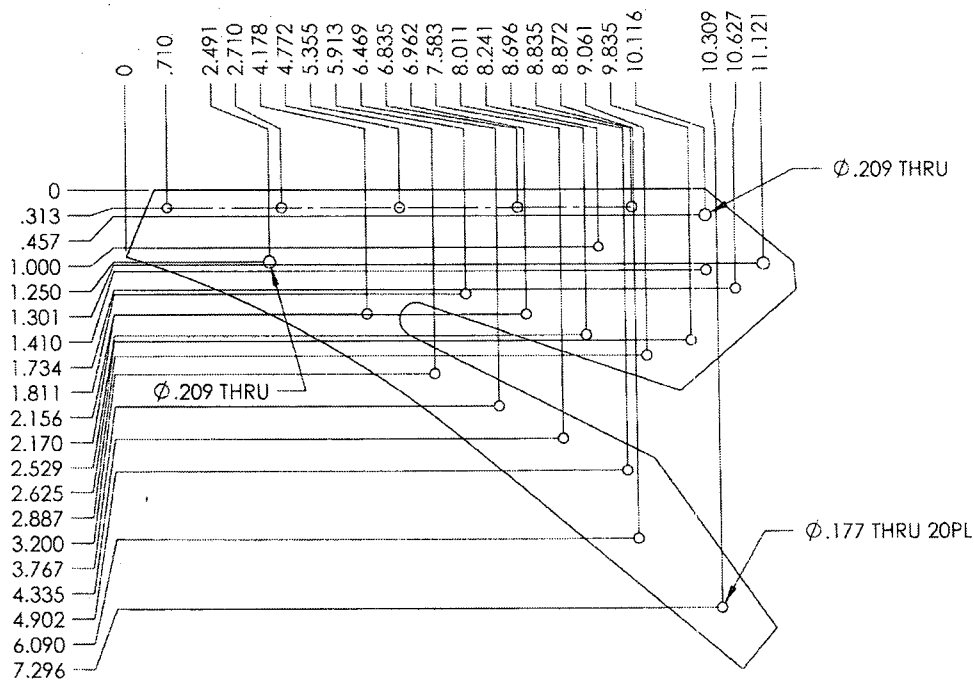
1

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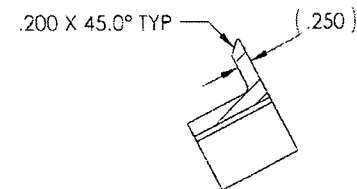


DESIGN: DATE	APICAL INDUSTRIES
REVISED: 09-20-08	2608 TEMPLE HEIGHTS DR.
DRAWN BY: TCHETTER	OCEANSIDE, CA. 92056-3512 (760)724-5300
CHECKED: P. REARD	
DATE: 09-20-08	
SCALE: NONE	
SHEET: 2 OF 8	

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SECTION A-A

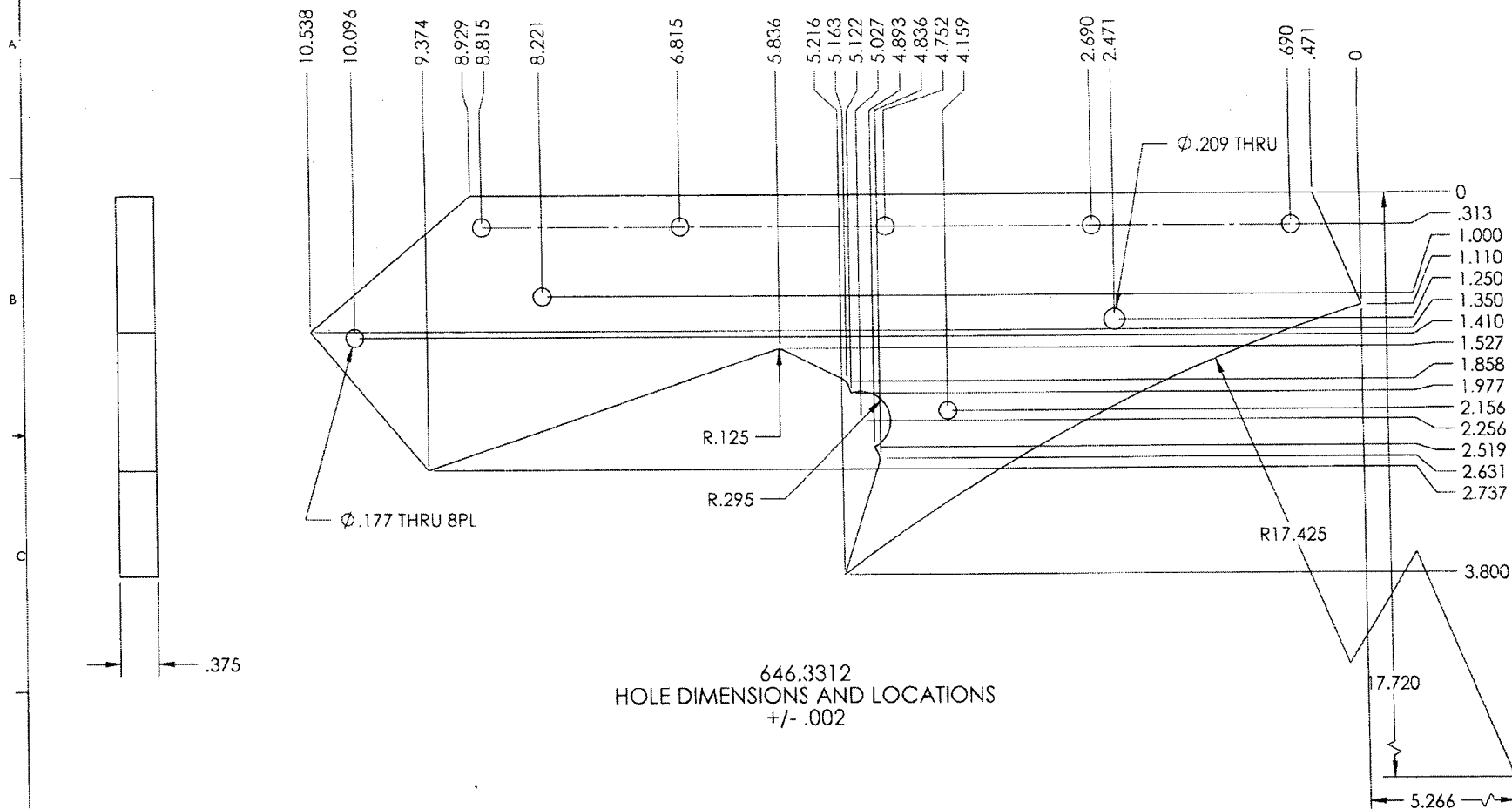


SECTION B-B

APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA, 92056-3512 (760)724-5300	
UPPER CUTTER ASSY	
OPERATOR: JPL ENGINEER: JPL DESIGNED: JPL DRAWING APPROVAL:	DATE: 06/21/08 BY: P. BRAVO SCALE: NONE
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS ARE TO .001 FRACTIONS ARE TO 1/16	SHEET 3 OF 6

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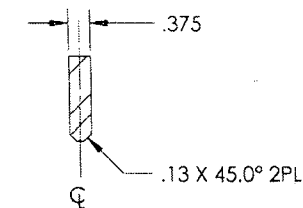
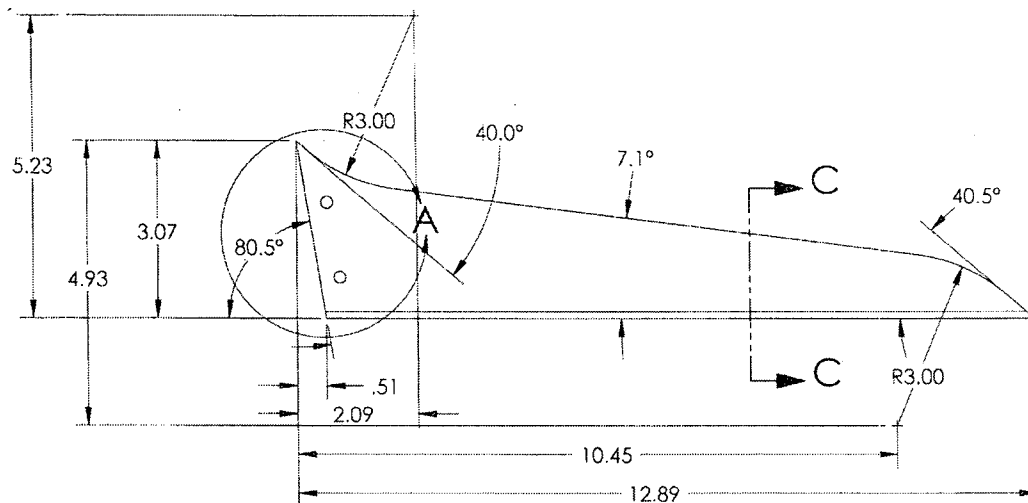
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



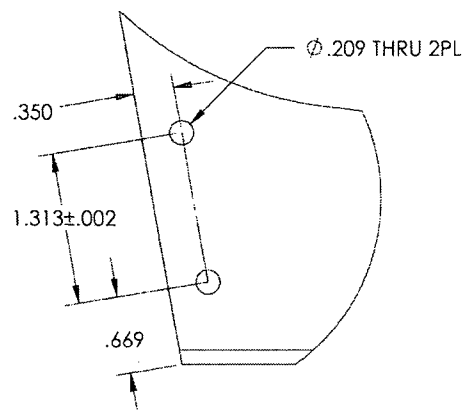
ORIGINAL DATE: 08-24-08		APICAL INDUSTRIES	
DRAWN BY: CHICKEE		2608 TEMPLE HEIGHTS DR.	
CHECKED BY: PRANSKY		OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DRAWING APPROVAL: [Signature]		UPPER CUTTER ASSY	
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES		SHEET: 07M16	DWG NO: 646.3300
TOLERANCES ARE:		SCALE: NONE	REV: N/C
1 PLACE DECIMALS: .01		SHEET: 4 OF 8	
2 PLACE DECIMALS: .005			
3 PLACE DECIMALS: .000			
ANGLES: .5°			

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REV	DESCRIPTION	DATE	APPROVED



SECTION C-C



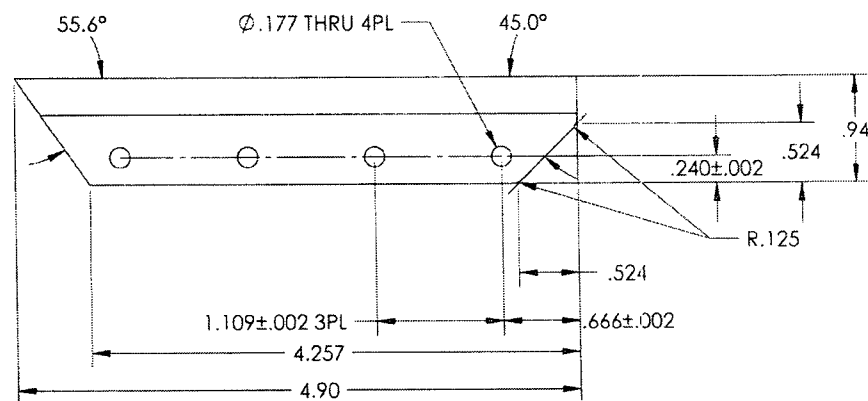
DETAIL A

646.3313

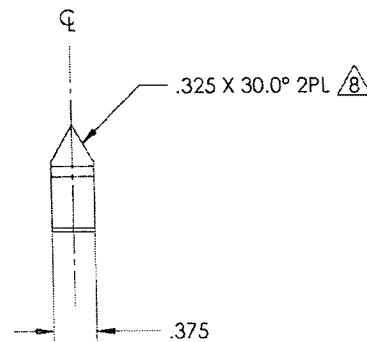
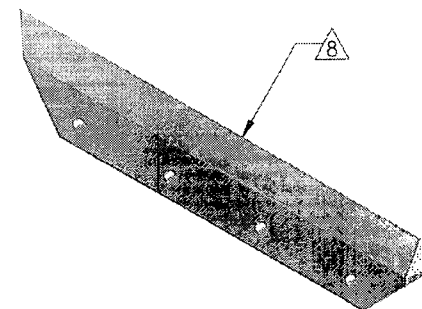
ORIGINAL DATE INCHES/DA/1971 DRAWN BY S. HUI CHECKED BY P. BRADY DRAWING APPROVAL P. BRADY SCALE CONTRACT NO.	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300 UPPER CUTTER ASSY	SEE CAGE CODE B 07M26 SCALE NONE	DWG NO 646.3300 SHEET 5 OF 6	REV N/C
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REV	DESCRIPTION	DATE	APPROVED



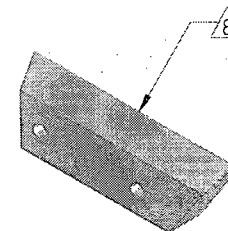
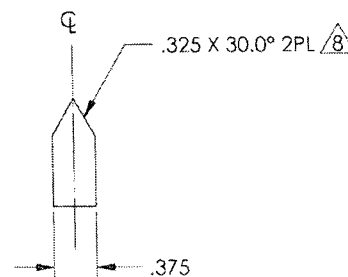
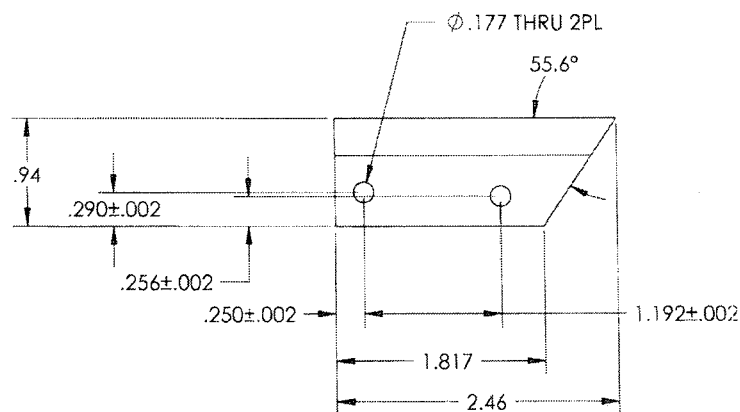
646.3314



DRAWING DATE 08/24/01 DRAWN BY J. B. BROWN CHECKED BY P. BROWN DRAWING APPROVAL P. BROWN CONTRACT NO.	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300 UPPER CUTTER ASSY
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS ARE TO 3 PLACES FRACTIONS ARE TO 16THS ANGLES ARE TO 1°	SIZE B CAGE CODE 07M26 DWG NO. 646.3300 SCALE NONE
SHEET 6 OF 8	REV 11/01

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REV	DESCRIPTION	DATE	APPROVED

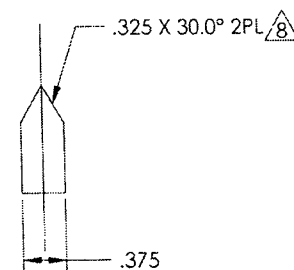
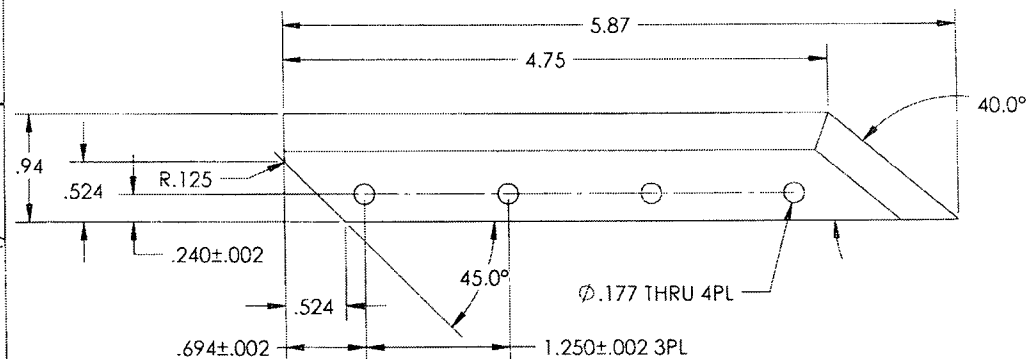
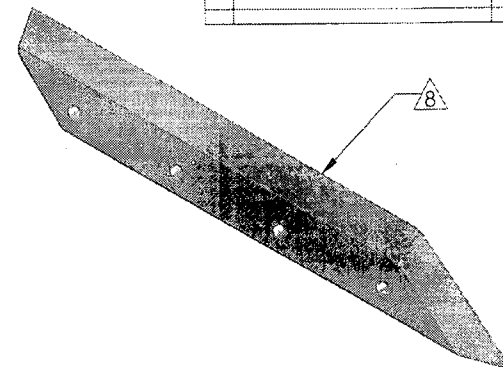


646.3315

ORIGINAL DATE (ADD-DA YES) CO-2-08 DRAWN BY: J. HICKER 3-1-08 P. BRAY DRAWING APPROVAL P. BRAY 01-20-08 CORPACT NO	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR OCEANSIDE, CA 92056-3512 (760)724-5300
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE 3 PLACE DECIMALS ± 0.1 1/16 IN DECIMALS ± 0.005 ANGLES ± 1°	SEE CAGE CODE 646.3300 SCALE NONE
SHEET 7 OF 8	REV N/C

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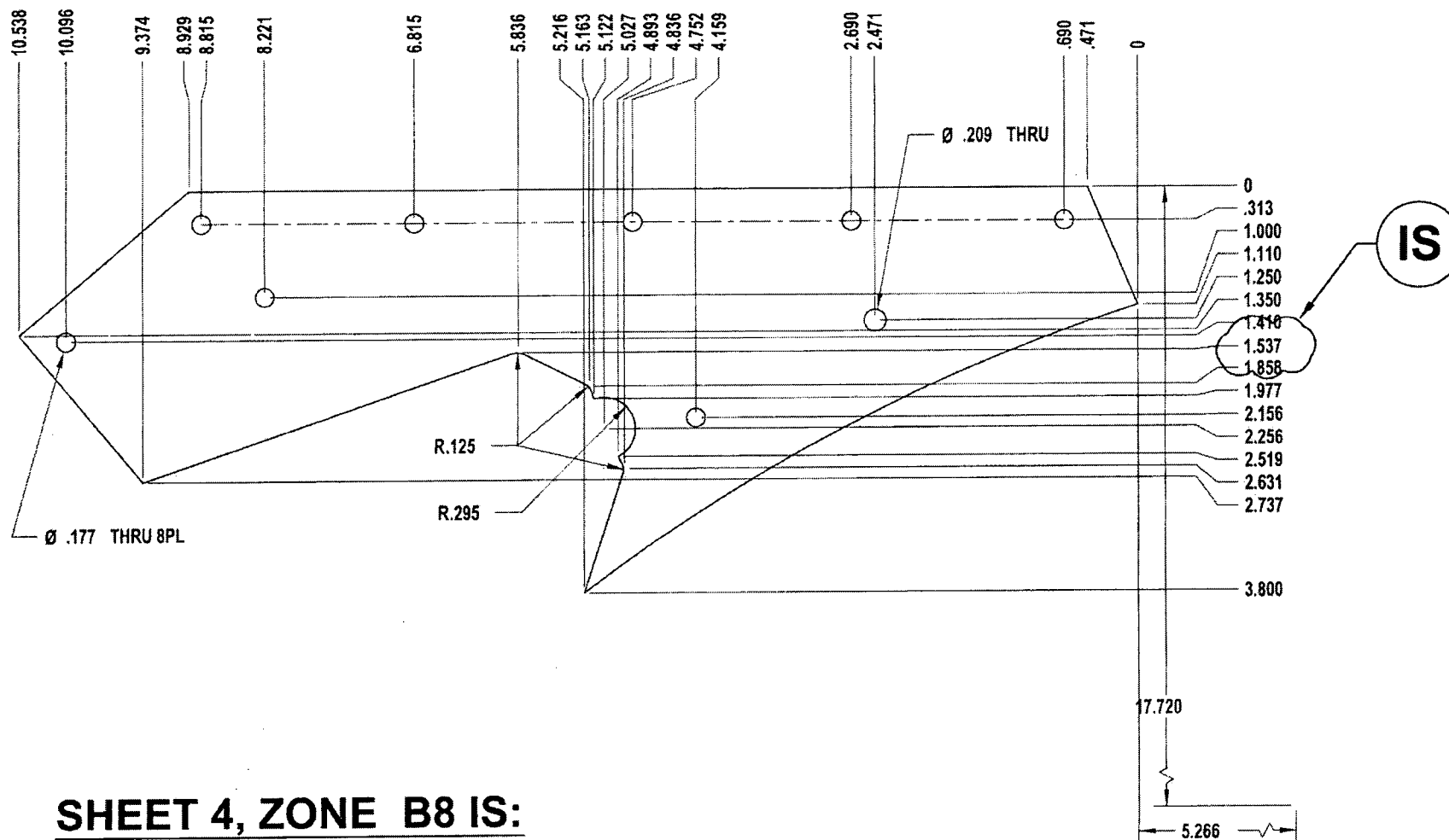
REVISIONS			
REV	DESCRIPTION	DATE	APPROVAL



646.3316

<small> ORIGINAL DATE: 08-21-08 DRAWN BY: P. BECK CHECKED BY: P. BECK DRAWING APPROVAL: P. BECK DESIGNED BY: P. BECK CONTRACT NO: </small>	APICAL INDUSTRIES <small>2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300</small>
<small> UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ±.01 2 PLACE DECIMALS ±.005 ANGLES ±.5° </small>	UPPER CUTTER ASSY <small> SIZE: CAGE CODE: DWG. NO: 646.3300 B 07M26 SCALE: NONE SHEET: 6 OF 8 </small>

APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 03724				SHEET 1 OF 1	
	DWG NO. 646.3300	REV: N/C	PREPARED BY B. PETERS	DATE: 12/05/12	EFFECT ON DWG <input type="checkbox"/> INC. <input checked="" type="checkbox"/> UNINC.	
	DWG TITLE: UPPER CUTTER ASSY					
APPROVED BY: ENGR <i>[Signature]</i>		MFG <i>[Signature]</i>		QC <i>[Signature]</i>	EFF: NEXT ORDER	
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE		REASON: REVISED ORDINATE DIMENSION.				ECR: D-12-025



SHEET 4, ZONE B8 IS:

DOCUMENTS EFFECTED:	<input type="checkbox"/> RFMS <input type="checkbox"/> MDL <input type="checkbox"/> INSTALL INSTRUC <input type="checkbox"/> ICA <input type="checkbox"/> BOM	CHANGE CATEGORY	DER REVIEW REQUIRED
		<input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

DART AEROSPACE LTD	Work Order:	109916
Description: LH HALF	Part Number:	646.3310
Inspection Dwg: 646.3300 Rev: N/C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
7.296	+/- .005	7.297	—		H-G	31006
3.767	+/- .005	3.767	—		"	
0.457	+/- .005	.458	—		"	
0.313	+/- .005	.312	—		"	
0.710	+/- .005	.705	—		"	
6.469	+/- .005	6.464	—		"	
10.116	+/- .005	10.111	—		"	
10.309	+/- .005	10.304	—		"	
φ 0.177	+ .005 / - .001	φ .177	—		Vern	ML-06
φ 0.209	+ .005 / - .001	φ .209	—		"	
0.250	+/- .005	.247	—		"	
1.250	+/- .005	1.251	—		"	
R 0.125	+/- .005	R .125	—		R-G	
3.513	+/- .005	3.512	—		Vern	ML-06
8.375	+/- .005	8.371	—		H-G	31006
0.250	+/- .005	.250	—		Vern	ML-06
8.1°	+/- .5°	8.1°	—		C-Square	
11.689	+/- .005	11.684	—		H-G	31006
11.250	+/- .005	11.245	—		"	
0.200 x 45°	+/- .005	.200 x 45°	—		Vern	ML-06

Measured by: <i>mf</i>	Audited by: <i>SS</i>	Preliminary Approval:
Date: 13/12/23	Date: 14-01-08	Date:

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15

Jean-Luc Menard

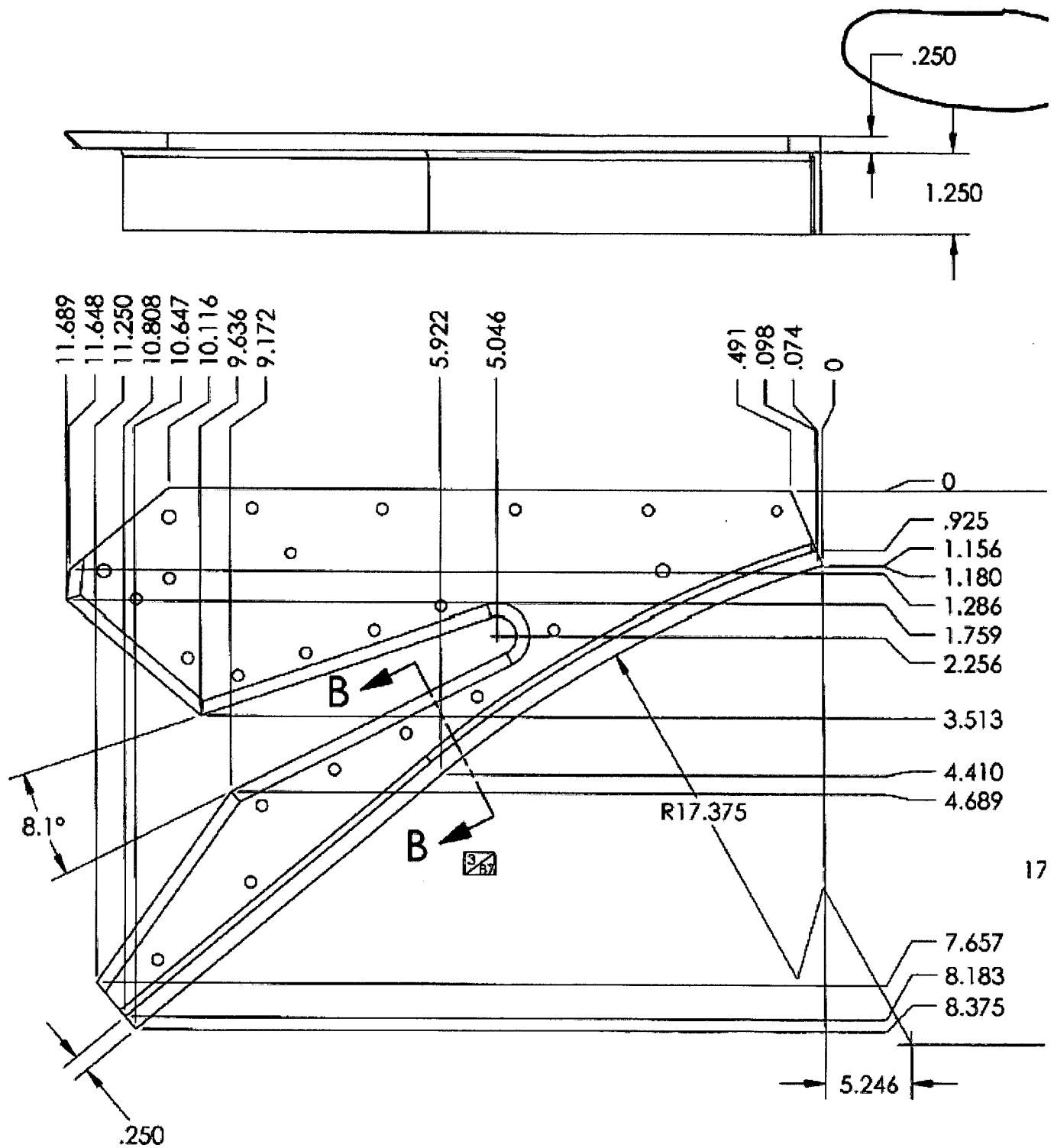
From: Pablo Bravo
Sent: August-07-13 9:54 AM
To: Jean-Luc Menard
Cc: Jean Francois Sauve
Subject: RE: Deviation?

JL,
This should be acceptable.

-Pablo

From: Jean-Luc Menard
Sent: Wednesday, August 07, 2013 4:34 AM
To: Pablo Bravo
Cc: Jean Francois Sauve
Subject: Deviation?

Hi Pablo,
We have a 646.3310 that was machined under tol,dwg calls .250" +/- .005.
There is one spot that came in @ .242".
Let me know if this is an acceptable deviation.
THX
JL



646.3310 SHOWN
646.3311 OPPOSITE

Jean-Luc Ménard
Production Engineering Supervisor



A.T.G. Industries Inc.
731, rue Industrielle Rd.
PLATING DEPARTMENT
Rockland, On K4K 1T2
Canada
Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 62865

Date: 30-Jan-14

To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ship To


DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via	
Quantity	Description	Rev:	
1 lot	Part: ASST 8 PCS D2224 (2.00) RED ANODIZE MIL-A-8625 TYPE II CLASS 2 20 PCS 646.3110 (10.65) 9 PCS 646.3210 (14.35) <u>12 PCS 646.3310 (18.10)</u> 12 PCS 646.9712 (14.50) 10 PCS 647.0310 (11.10) 10 PCS 647.9314 (11.05) 3 PCS 647.9316 (10.00) 15 PCS 647.9610 (16.05) 20 PCS 647.9612 (16.05) 12 PCS 649.5312 (10.15) HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 PRIME MIL-P-23377J TYPE I CLASS N PRICE IS PER PIECE Job: 20140079	Line:	
Certificate of Conformance			
A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order.			
ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY			
DATE: <u>30/1/14</u>			
CERTIFIED SIGNATURE: <u></u>			
RECEIVER SIGNATURE: _____			



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO22580

Purchase Order Date 1/10/2014

PO Print Date 1/30/2014

Page Number 3 of 7

Order From :

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE ROAD
ROCKLAND, ON K4K 1T2
CANADA

VC-ATG001

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 613-446-4544

Ship To Contact

Ship To Phone

Ship Via: VENDOR'S TRUCK

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

6	109913	646.3110 CHANNEL	1/24/2014 Yes 1/31/2014	20.00	\$10.65	\$213.00
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FINISH: HARD BLACK ANODIZE AS PER IAW MIL-A-8625 TYPE III, CLASS 2 / PRIME AS PER IAW MIL-P-23377J TYPE 1 CLASS N

Line Total: \$213.00

7	109915	646.3210 SUPPORT	1/24/2014 Yes 1/31/2014	9.00	\$14.35	\$129.15
---	--------	------------------	-------------------------------	------	---------	----------

SAME AS ABOVE

Line Total: \$129.15

8	109916	646.3310 LH HAFT	1/24/2014 Yes 1/31/2014	12.00	\$18.10	\$217.20
---	--------	------------------	-------------------------------	-------	---------	----------

SAME AS ABOVE

Line Total: \$217.20

Note:

1/30/2014